



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Richard M. Weinshilboum et al. Art Unit : Unknown
Serial No. : 10/668,800 Examiner : Unknown
Filed : September 23, 2003
Title : SULFOTRANSFERASE SEQUENCE VARIANTS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL

The following correspondence relating to this application is enclosed for filing:

1. Information Disclosure Statement (1 page);
2. Form PTO-1449 (1 page);
3. Copies of Non-Patent Cited References (42 documents); and
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Respectfully submitted,

Date: February 2, 2004

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INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449.

This statement is being filed within three months of the filing date of the application or before the receipt of a first Office action on the merits. Please apply any charges or credits to Deposit Account No. 06-1050.

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Substitute Form PTO-1449
(Modified)U.S. Department of Commerce
Patent and Trademark OfficeAttorney's Docket No.
07039-118003Application No.
10/668,800**Information Disclosure Statement
by Applicant**

(Use several sheets if necessary)

Applicant
Richard M. Weinshilboum et al.Filing Date
September 23, 2003

Group Art Unit

(37 CFR §1.98(b))

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	5,733,729	03/31/98	Lipshutz et al.			
	AB	5,770,722	06/23/98	Lockhart et al.			

Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AC							

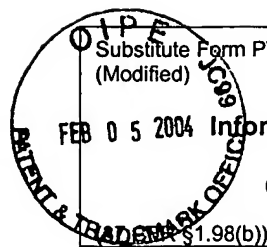
Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AD	Wilkinson, "Statistical Estimations in Enzyme Kinetics", <u>Biochem. J.</u> , 1961, 80:324-332.
	AE	Cleland, "Computer Programmes for Processing Enzyme Kinetic Data", <u>Nature</u> , 1963, 198(4879): 463-465.
	AF	Kohler et al., "Continuous Cultures of Fused Celss Secreting Antibody of Predefined Specificity", <u>Nature</u> , 1975, 256(5512):495-497.
	AG	Reiter et al., "Platelet Phenol Sulfotransferase Activity: Correlation With Sulfate Conjugation of Acetaminphen", <u>Clin. Pharmacol. Ther.</u> , 1982, 32(5):612-621.
	AH	Kozbor et al., "The Production of Monoclonal Antibodies From Human Lymphocytes", <u>Immunology Today</u> , 1983, 4(1):72-79.
	AI	Cote, at al., "Generation of Human Monoclonal Antibodies Reactive With Cellular Antigens", <u>Proc. Natl. Acad. Sci. USA</u> , 1983, 80(7): 2026-2030.
	AJ	Cole et al., "The EBV-Hybridoma Technique and its Application to Human Lung Cancer", <u>Monoclonal Antibodies and Cancer Therapy, Proceedings of the Roche-UCLA Symposium</u> , Park City, Utah, January 26-February 2, 1985, 77-96.
	AK	Weinshilboum, "Phenol Sulfotransferase in Humans: Properties, Regulation, and Function", <u>Fed. Proc.</u> , 1986, 45(8):2223-2228.
	AL	Campbell et al., "Human Liver Phenol Sulfotransferase: Assay Conditions, Biochemical Properties and Partial Purification of Isozymes of the Thermostable Form", <u>Biochem. Pharmacol.</u> , 1987, 36(9): 1435-1446.
	AM	Huse et al., "Generation of a Large Combinatorial Library of the Immunoglobulin Repertoire in Phage Lambda", <u>Science</u> , 1989, 246:1275-1281.
	AN	Price et al., "Genetic Polymorphism for Human Platelet Thermostable Phenol Sulfotransferase (TS PST) Activity", <u>Genetics</u> , 1989, 122:905-914.
	AO	Guatelli et al., "Isothermal, <i>In Vitro</i> Amplification of Nucleic Acids by a Multienzyme Reaction Modeled After Retroviral Replication", <u>Proc. Natl. Acad. Sci. USA</u> , 1990, 87(5): 1874-1878.
	AP	Van Loon et al., "Thiopurine Methyltransferase Isozymes In Human Renal Tissue", <u>Drugs Metab. Dispo</u> , 1990, 18(5):632-638.
	AQ	Weiss, "Hot Prospect for New Gene Amplifier", <u>Science</u> , 1991, 254(5036):1292-1293.

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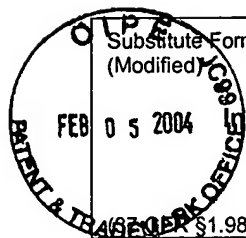
Other Documents (include Author, Title, Date, and Place of Publication)

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	AR	Van Loon et al., "Human Kidney Thiopurine Methyltransferase Photoaffinity Labeling With S-Adenosyl-L-Methionine", <u>Biochem. Pharmacol.</u> , 1992, 44(4):775-785.
	AS	Lewis, "PCR's Competitors are Alive and Well and Moving Rapidly Towards Commercialization", <u>Genetic Engineering News</u> , 1992, 12(9):1 (3 pages).
	AT	Terwilliger et al., "Linkage Disequilibrium Between Alleles at Marker Loci", <u>Handbook of Human Genetic Linkage</u> , The Johns Hopkins University Press, Baltimore, 1994, 188-193.
	AU	Wood et al., "Human Liver Thermolabile Phenol Sulfotransferase: cDNA Cloning, Expression and Characterization", <u>Biochem. Biophys. Res. Commun.</u> , 1994, 198(3):119-1127.
	AV	Hacia et al., "Detection of Heterozygous Mutations in BRCA1 Using High Density Oligonucleotide Arrays and Two-Colour Fluorescence Analysis", <u>Nature Genetics</u> , 1996, 14:441-447.
	AW	Raftogianis et al., "Human Phenol Sulfotransferase Pharmacogenetics: STP1 Gene Cloning and Structural Characterization" <u>Pharmacogenetics</u> , 1996, 6:473-487.
	AX	Dooley et al., "Genomic Organization and DNA Sequences of Two Human Phenol Sulfotransferase Genes (STP1 and STP2) on the Short Arm of Chromosome 16", <u>Biochem. Biophys. Res. Comm.</u> , 1996, 228:134-140.
	AY	Raftogianis et al., "Phenol Sulfotransferase (PST) Molecular Pharmacogenetics", <u>Clin. Pharmacol. Ther.</u> , 1997, 61(2):234.
	AZ	Her et al., "Human Sulfotransferase SULT1C1: cDNA Cloning, Tissue-Specific Expression, and Chromosomal Localization", <u>Genomics</u> , 1997, 41:467-470.
	AAA	Raftogianis, et al., "Phenol Sulfotransferase Pharmacogenetics in Humans: Association of Common SULT1A1 Alleles with TS PST Phenotype", <u>Biochem. Biophys. Res. Commun.</u> , 1997, 239, article no. RC977466, 298-304.
	ABB	Raftogianis et al., "Human Phenol Sulfotransferase Pharmacogenetics: Association of Common SULT1A1 Polymorphisms with TS PST Phenotype", <u>8th North American ISSX Meeting, Hilton Head, South Carolina</u> , 1997 12:96, Abstract
	ACC	Lavigne et al., "An Association Between the Allele Coding for a Low Activity Variant of Catechol-O-Methyltransferase and the Risk for Breast Cancer", <u>Cancer Research</u> , 1997, 57:5493-5497.
	ADD	Weinshilboum et al., "Sulfotransferase Molecular Biology: cDNAs and Genes", <u>Fed. Proc.</u> , 1997, 11(1):3-14.
	AEE	Raftogianis et al., "Human Phenol Sulfotransferase (PST) Pharmacogenetics: Analysis of SULT1A1 and SULT1A2", <u>Clin. Pharmacol. Ther.</u> , 1998, 63(2):224 abstract 1 page and cover.
	AFF	Thompson et al., "Genetic Polymorphisms in Catechol-O-Methyltransferase, Menopausal Status, and Breast Cancer Risk", <u>Cancer Research</u> , 1998, 58:2107-2110.
	AGG	Hengstler et al., "Polymorphisms of N-Acetyltransferases, Glutathione S-Transferases, Microsomal Epoxide Hydrolase and Sulfotransferases: Influence on Cancer Susceptibility", <u>Recent Results in Cancer Research</u> , 1998, Springer-Verlage Berlin, Heidelberg, 154:47-85.
	AHH	Ozawa et al., "Genetic Polymorphisms in Human Liver Phenol Sulfotransferases Involved in the Bioactivation of N-Hydroxy Derivatives of Carcinogenic Arylamines and Heterocyclic Amines", <u>Bhem. Biol. Interact.</u> , 1998, 109:237-248.
	AII	Raftogianis et al., "Human Phenol Sulfotransferases SULT1A2 and SULT1A1 Genetic Polymorphisms, Allozyme Properties, and Human Liver Genotype-Phenotype Correlations", <u>Biochem. Pharm.</u> , 1999, 58:605-616.

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	AJJ	Huang et al., "Breast Cancer Risk Associated with Genotype Polymorphism of the Estrogen-Metabolizing Genes CYP17, CYP1A1, and COMT: A Multigenic Study on Cancer Susceptibility", <u>Cancer Research</u> , 1999, 59:4870-4875.
	AKK	Steiner et al., "Phenol Sulphotransferase SULT1A1 Polymorphism In Prostate Cancer: Lack of Association", <u>Arch Toxicol</u> , 2000, 74:222-225
	ALL	Seth et al., "Phenol Sulfotransferases: Hormonal Regulation, Polymorphism, and Age of Onset of Breast Cancer", <u>Cancer Research</u> , 2000, 60:6859-6863
	AMM	Bamber et al., "Phenol Sulphotransferase SULT1A1 1 Genotype is Associated with Reduced Risk of Colorectal Cancer", <u>Pharmacogenetics</u> , 2001, 11(8):679-685.
	ANN	Zheng et al., "Sulfotransferase 1A1 Polymorphism, Endogenous Estrogen and Exposure, Well-Done Meat Intake, and Breast Cancer Risk", <u>Cancer Epidemiology, Biomarkers & Prevention</u> , 2001, 10:89-94.
	AOO	Yim et al., "Relationship Between the Val ¹⁵⁸ Met Polymorphism of Catechol O-Methyl Transferase and Breast Cancer" <u>Pharmacogenetics</u> , 2001, 11:279-286.
	APP	Vachon et al., "SULT1A1 and HRT-Associated Increases in Mammographic Breast Density", <u>American Association of Cancer Research Annual Meeting</u> , 2002, Abstract No. 4216, 1 page.
	AQQ	Ozawa et al., "Association of Genotypes of Carcinogen-Activating Enzymes, Phenol Sulfotransferase SULT1A1 (ST1A3) and Arylamine N-Acetyltransferase NAT2, With Urothelial Cancer In A Japanese Population" <u>Int. J. Cancer</u> , 2002, 203:418-421.
	ARR	Wong et al., "Association of The SULT1A1 R213H Polymorphism With Colorectal Cancer", <u>Clinical and Experimental Pharmacology and Physiology</u> , 2002, 29:754-758.
	ASS	Wu et al., "SULT1A1 Polymorphism and Esophageal Cancer in Males", <u>Int. J. Cancer</u> , 2003, 103, 101-104.

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